WHAT IS CLAIMED IS:

1. A non-invasive apparatus system for monitoring drug hepatotoxicity or abnormal liver function comprising:

   (a) a sensor for measuring artery blood pressure waveforms to form electric waves representing the artery blood pressure waveforms; and

   (b) an analyzer for receiving the electric waves from (a), wherein waveform parameters (including number of wave peaks, major wave peak point, major wave trough point, minor wave peak point, and/or minor trough point), time parameters, pressure parameters, oblique angle parameters, superficial measure parameters, an/or ratio parameters in the electric waves can be calculated by mathematical formulas.

2. The apparatus system according to Claim 1, wherein the sensor is a pressure sensory device or one or more electrode chips.

3. The apparatus system according to Claim 2, wherein the pressure sensory device is an apparatus worn on wrist to measure the blood pressure waveform of radial artery.

4. The apparatus system according to Claim 1, wherein the analyzer further comprises a display device for showing the analyzing data and results recorded in the analyzer.

5. The apparatus system according to Claim 1, wherein the analyzer optionally comprises a warning device for emitting warning signals.

6. The apparatus system according to Claim 1, wherein the analyzer further comprises an apparatus, which can transfer the measured and analyzed data to a terminal at hospital's or doctor's end, and the apparatus can further receive the signals transferred from the hospital or doctor.

7. The apparatus system according to claim 6, wherein the signal is transferred in a wire or wireless way.

EXPRESS MAIL LABEL
NO.: EV 327550322 US

8. A non-invasive apparatus system for monitoring drug hepatotoxicity or abnormal liver function comprising:

a wrist type sphygmomanometer which uses a pressure sensory element to transform the radial artery blood pressure waveform of the patient's arm to waveform parameters (including number of wave peak, major wave peak point, major wave trough point, minor wave peak point, and/or minor wave trough point), time parameters, pressure parameters, oblique angle parameters, superficial measure parameters, and/or ratio parameters;

a bedside recording analyzer which can receive, amplify, filter, and analog-digital transform the electric wave from the sphygmomanometer, wherein the analyzer comprises a small computer to record blood pressure waveform and analyze the frequency, amplitude of vibration, and angles; and

an information server and a terminal machine which can send the information from the analyzer to a hospital or clinic for determining by a doctor, and send back instructions from the doctor to the patient's bedside record analyzer.

9. A method for monitoring hepatotoxicity or drug induced abnormal liver function, the method comprising:

the utilization of the apparatus system according to any one of Claims 1 to 8 in monitoring and calculating the blood pressure waveform wave form parameter (including number of wave peaks, major wave peak point, major wave trough point, minor wave peak point, and/or minor wave trough point), time parameters, pressure parameters, oblique angle parameters, superficial measure parameters, and/or ratio parameters before and after taking a drug; if the altered amounts of any or some of the parameters before and after taking the drug are lower than a certain preset value, it means that the drug does not induce liver function side effect; if the altered amounts of any or some of the parameters are between two certain preset values, it means that the drug has induced a certain level of liver function change; if the altered amounts of any or some of the

parameter values are higher than a preset value, it means that the drug has induced a severe liver function change.